

CLAIMS

1. An electrolyte comprising a precipitate which is formed when depositing metal on a metal sheet in an electrolytic solution containing an aromatic compound having at least one kind from a hydroxyl group and a group in which hydrogen in a hydroxyl group is substituted with an alkali metal,
the metal sheet not containing the metal to be deposited.

2. An electrolyte according to claim 1, wherein the aromatic compound has at least one kind from the group consisting of a hydroxyl group and a group in which hydrogen in a hydroxyl group is substituted with an alkali metal, and has at least one kind from the group consisting of a hydrogen atom and an alkyl group having a carbon number of 1 to 10,

the former kind being bonded to aromatic ring at each of two positions where hydrogen atoms are bondable,

the latter kind being bonded to aromatic ring at each of the remaining positions where hydrogen atoms are bondable.

3. An anode comprising:

a metal sheet which is a precipitation substrate for depositing metal and does not contain the metal to be deposited; and

a precipitation film made of a precipitate which is formed when depositing the metal on the metal sheet in an electrolytic solution containing an aromatic compound having at least one kind from a hydroxyl group and a group in which hydrogen in a hydroxyl group is

substituted with an alkali metal.

4. An anode according to claim 3, wherein the aromatic compound has at least one kind from the group consisting of a hydroxyl group and a group in which hydrogen in a hydroxyl group is substituted with an alkali metal, and has at least one kind from the group consisting of a hydrogen atom and an alkyl group having a carbon number of 1 to 10, the former kind being bonded to aromatic ring at each of two positions where hydrogen atoms are bondable, the latter kind being bonded to aromatic ring at each of the remaining positions where hydrogen atoms are bondable.

5. An anode according to claim 3, wherein the metal to be deposited is lithium (Li).

6. A battery comprising:

a cathode;
an anode; and
an electrolyte,

wherein the electrolyte has a precipitate which is formed when depositing metal on a metal sheet in an electrolytic solution containing an aromatic compound having at least one kind from a hydroxyl group and a group in which hydrogen in a hydroxyl group is substituted with an alkali metal,

the metal sheet not containing the metal to be deposited.

7. A battery according to claim 6, wherein the aromatic compound

has at least one kind from the group consisting of a hydroxyl group and a group in which hydrogen in a hydroxyl group is substituted with an alkali metal, and has at least one kind from the group consisting of a hydrogen atom and an alkyl group having a carbon number of 1 to 10,

the former kind being bonded to aromatic ring at each of two positions where hydrogen atoms are bondable,

the latter kind being bonded to aromatic ring at each of the remaining positions where hydrogen atoms are bondable.

8. A battery comprising:

a cathode;

an anode; and

an electrolyte,

wherein the anode comprises a metal sheet which is a precipitation substrate for depositing metal and does not contain the metal to be deposited and a precipitation film made of a precipitate formed when depositing the metal on the metal sheet in an electrolytic solution containing an aromatic compound having at least one kind from a hydroxyl group and a group in which hydrogen in a hydroxyl group is substituted with an alkali metal.

9. A battery according to claim 8, wherein the aromatic compound has at least one kind from the group consisting of a hydroxyl group and a group in which hydrogen in a hydroxyl group is substituted with an alkali metal, and has at least one kind from the group consisting of a hydrogen atom and an alkyl group having a carbon number of 1 to 10,

the former kind being bonded to aromatic ring at each of two

positions where hydrogen atoms are bondable,

the latter kind being bonded to aromatic ring at each of the remaining positions where hydrogen atoms are bondable.

10. A battery according to claim 8, wherein the metal to be deposited is lithium (Li).